Chapter 21A.24 Rules and Regulations of the Department of Development and Environmental Services

Livestock Flood Sanctuaries

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21A-24-XXX Definitions.

- A. Animal unit. "Animal unit" means one adult horse or bovine, two ponies, five small livestock, or equivalent thereof (excluding sucklings), provided that miniature horses and feeder calves are considered small livestock.
- B. Base area. "Base area" means the area of the total footprint of the livestock flood sanctuary at grade. This area is the sum of the top surface of the sanctuary (including any animal access areas) plus the horizontal area of the side slopes.
- **21A-24-XXX** <u>Purpose</u>. It is the purpose of these rules to implement the provisions of K.C.C. 21A.24.250 by prescribing requirements for the siting, design and construction of livestock flood sanctuaries and the legal agreements to be noticed on title.
- **21A-24-XXX** <u>Site Selection</u>. One livestock flood sanctuary per site shall only be sited in locations demonstrated to be consistent with the following siting requirements:
- A. The location of the livestock flood sanctuary shall be consistent with K.C.C. 21A.24.250.J;
- B. The portion of the property used as livestock pasture and housing areas shall be located in the 100-year floodplain designated by the Federal Emergency Management Agency (FEMA);
 - C. No portion of the sanctuary shall be located within the FEMA Floodway

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- D. No portion of the sanctuary shall be located with 100 feet of the top of bank of class 2 and 3 streams unless the buffer vegetation is enhanced to increase water quality protection.
- E No portion of the sanctuary shall be located within wetlands which are grazed wet meadows or their buffers unless:
- a. the grazed wet meadow wetland or its buffer is currently used for agricultural or grazing activities exempted under K.C.C. 21A.24.050;
- b. there is no practical alternative site outside of the grazed wet meadow wetland or its buffer:
 - c. the facility is located the closest practical distance to the outside buffer edge; and
- d. the grazed wet meadow wetland or vegetative buffer is enhanced to provide equal or greater protection to the wetland;
- E. The location shall be on the highest ground practicable on the pasture portion of the property to reduce the amount of fill necessary; and
- F. All portions of the sanctuary shall have a minimum 15-foot setback from property lines.

21A-24-XXX <u>Dimensions and Sizing</u>. Livestock flood sanctuaries shall meet the following dimensional requirements:

- A. The height of the top surface of the sanctuary shall be one foot above the 100-year flood elevation;
- B. The maximum size of the top surface of the sanctuary shall be no greater than 50 square feet per animal unit. An additional area up to 25 percent may be permitted to accommodate herd growth;
- C. A strip no greater than 15 feet wide may be permitted along one width and one length of the top surface to provide access for animal feeding, milking and manure management. This strip is in addition to the allowable maximum top surface area;
- D. Side slopes of the fill shall be 2:1 or greater to minimize the total amount of fill placed in the floodplain;
- E. The base area of the sanctuary shall not exceed two percent of the site area, or the total footprint of the sanctuary base area plus other structures on the property shall not exceed five percent of the site area, whichever is less;
 - F. The width of the sanctuary shall be:
 - 1. less than 15 percent of the total floodplain width of the property; and
- 2. oriented perpendicular to the river flow, or the flood flow if known for that area of the floodplain;
- G. The single access ramp shall have a minimum slope of 8:1 and not exceed 500 feet. If the ramp is built on fill, it shall run parallel to the river flow, or the flood flow if known for that

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| area of the floodplain. If the ramp is built on pand | oiling construction, the orientation does not matter; |
| H. The access ramp shall have a width | no greater than 18 feet. |

- **21A-24-XXX** <u>Site Preparation.</u> A. Erosion and sediment control measures consistent with the King County Surface Water Design Manual shall be applied and maintained before the beginning of and throughout sanctuary construction.
- B. The top four inches of soil shall be removed from the sanctuary's base foundation area and stockpile this topsoil for latter placement on the sanctuary surface. If the topsoil is stockpiled for more than 48 hours, the stockpile shall be covered or stabilized by approved erosion and sediment control measures.
- **21A-24-XXX** Excavation, Fill and Construction. A. Soil shall come from on-site areas within the floodplain that would provide compensatory storage for the sanctuary whenever practical. Soil shall only be extracted from non-sensitive areas; it shall not be excavated from any areas classified as wetlands or other sensitive areas;
- B. Any soil extracted from property protected by the Farmland Preservation Program shall not contain any of the A or B soil horizon layers. Each layer shall be stripped and stockpiled separately prior to fill excavation and then replaced in the same order they were removed.
- C. If soil used for fill comes from off-site, it shall be extracted from approved sources in accordance with K.C.C. 16.82.100;
- D. The maximum thickness of each fill layer shall be two feet before compaction by the routing of construction equipment back and forth over the successive layers until the final height of the pad surface is obtained;
 - E. The ramp surface may be composed of concrete, wood or compacted earth material;
- F. The final surface of the pad shall be the stockpiled topsoil, seeded in accordance with the recommendations of the U.S. Natural Resources Conservation Service;
- G. The side slopes shall be protected from erosion during flood events by covering with erosion blankets, seeding and placing live stakes of willow, cottonwood or poplar spaced approximately every two to three feet in a triangular pattern. The side slopes shall be kept free from grazing and trampling by livestock until well established. Three strand barbed wire fencing shall be used around the base of the sanctuary unless livestock are otherwise restrained from the area; and
- H. The top surface of the sanctuary shall be enclosed by a fence built in accordance with U.S. Natural Resources Conservation Service specifications.

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- **21A-24-XXX** <u>Legal Agreements.</u> A. Affidavits or other appropriate legal documents shall be prepared and submitted to the County in which all property owners within one quarter mile upstream and downstream consent to any resulting flood impacts on their property and changes in the floodplain and floodway which may result from the sanctuary. These documents shall be in addition to any other notice on title required under K.C.C. 21A.24 and shall be filed as notice on title consistent with K.C.C. 21A.24.170 for the affected properties. If the neighboring property owners are more than one quarter mile from the sanctuary, they shall be notified of the proposed action.
- B. The Director may waive the requirement in subsection A if the applicant demonstrates that there will be no significant impact to floodplain or floodway location and height on neighboring properties or if the applicant provides in writing acceptable extenuating circumstances that prevented written consent from being obtained.
- C. The applicant shall submit an affidavit or other appropriate legal document, transferable with the title, which states that:
- 1. The sanctuary design was reviewed and approved by the U.S. Natural Resources Conservation Service and the King Conservation District;
- 2. The property owner accepts any resulting flood impacts on their property and any changes in the floodplain and floodway which may result from the sanctuary;
- 3. The property owner understands that the use of the sanctuary is strictly for the purpose of emergency evacuation and that construction of any additional structures not permitted under these administrative rules or the storage of equipment or materials on the sanctuary are not permitted.
- 4. The property owner agrees that if livestock no longer have access to the sanctuary, the fill will be removed from the floodplain unless all requirements of K.C.C. 21A.24 can be met.
- **21A-24-XXX** Severability. If a provision of the rules contained herein or its applicability to any person or circumstance is held invalid, the remainder of the provisions of these rules or the application of the provision to other persons or circumstances shall not be affected.

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- C. 100-year floodplain. "100-year floodplain:" means the total area subject to inundation by a flood having a one percent chance of being equaled or exceeded in any given year, often referred to as the "100-year flood."
- D. FEMA floodway. "FEMA floodway" means the channel of the stream and that portion of the adjoining floodplain which is necessary to contain and discharge the 100-year flood flow without increasing the 100-year floodplain elevation more than one foot as administered by the Federal Emergency Management Agency (FEMA).
- E. Site. "Site" means a single lot, or two or more contiguous lots that are under common ownership or documented legal control, used as a single parcel for a development proposal in order to calculate compliance with this rule.